IN THE SPECIFICATION:

Please amend the paragraph beginning at page 5, line 5, as follows:

More specifically, Fig. 18 shows measurement results of fluctuation in rotation of the driving roll 102 driving the intermediate transfer belt 100 in the aforementioned color image forming apparatus in such a state that no improving technique is employed, i.e., the attachment of a flywheel to the driving roll 102 and the connection of the driving roll 102 and the driving gear with an elastic member or a viscoelastic member are not employed. The ordinate in Fig. 18 indicates the value obtained by FFT analysis of fluctuation in rotation velocity of the driving roll 102. Fig. 19 shows the transfer function characteristics of the driving system from the driving motor to the driving roll 102. The ordinate in Fig. 19 indicates the value showing a magnitude of the transfer function. The two significant peaks occurring in Fig. 18 are a peak at 34.5 Hz corresponding to the engaging frequency of the gears for rotationally driving the driving roll 102 and a peak at 69.0 Hz corresponding to the secondary harmonic wave of the engaging frequency of the gears for rotationally driving the driving roll 102.

Please amend the paragraph beginning at page 5, line 23, as follows:

It is understood from Fig. 19 that the transfer function has a resonance point with a peak around 50 Hz and a magnifying area in a range of from 20 to 70 Hz, so as to cause the peak in velocity fluctuation at 34.5 Hz in Fig. 18. Furthermore, as a result of analysis of the characteristic value of the stretching and driving system for stretching and driving the ~~belt~~ intermediate transfer belt 100, it has been found that, as shown in Fig. 19, the resonance point with a peak around 50 Hz is caused by the inertia and the torsional rigidity of the backup roll

106, the tension roll 105 and the primary transfer surfacing roll 104, which are arranged on the left side of the belt stretching and driving system, and the spring constant of the ~~belt~~ intermediate transfer belt 100 itself. In other words, in the stretching and driving system for stretching and driving the ~~belt~~ intermediate transfer belt 100, the backup roll 106, the tension roll 105 and the primary transfer surfacing roll 104, which are arranged on the left side of the belt stretching and driving system, function as an inertial mass as viewed from the driving roll 102 for driving the ~~belt~~ intermediate transfer belt 100, and the backup roll 106, the tension roll 105 and the primary transfer surfacing roll 104 have torsional rigidity. Furthermore, the backup roll 106, the tension roll 105 and the primary transfer surfacing roll 104 are connected to the driving roll 102 mainly through the belt functioning as an elastic body to constitute the stretching and driving system. Therefore, it is considered that the resonance point of the ~~belt~~ intermediate transfer belt 100 itself and the stretching and driving system constituted with the backup roll 106, the tension ~~roll and~~ roll 105 and the primary transfer surfacing roll 104 appears as a large peak in the magnifying area in the transfer function characteristics, which becomes the principal factor of the fluctuation in velocity of the ~~belt~~ intermediate transfer belt 100.

Please amend the paragraph beginning at page 7, line 4, as follows:

On the other hand, the resonance point ascribed to the torsional rigidity of the driving system from the driving motor to the driving roll 102 is present around 200 Hz, and it is understood that it corresponds to the peak around 200 Hz in Fig. 19. That is, in order to stabilize the driving velocity of the belt, the attachment of a flywheel to the driving system of the driving roll and the connection of the driving roll 102 and the driving gear with an elastic member can reduce or move higher or lower the resonance point around 200 Hz ascribed to the torsional

rigidity of the driving system for driving the driving roll 102, but cannot change the resonance point around 50 Hz ascribed to the inertia and the torsional rigidity of the belt stretching and driving system and the spring constant of the belt itself. As a result, no sufficient effect is obtained in stabilizing the velocity of the belt, and such a problem remains in that banding that is liable to be recognized as a defect in image quality cannot be effectively prevented.

Please amend the paragraph beginning at page 11, line 21, as follows:

In Figs. 2 and 3, numeral 1 denotes a main body of a tandem digital color printer or duplicator, and in the case of the digital color duplicator, an automatic document feeder (ADF) 3 for automatically feeding a document 2 in the form of a sole sheet separated from another, and a document reading device 4 for reading an image of the document 2 fed by the automatic document feeder 3 are arranged in an upper part of the main body 1 as shown in Fig. 3. In the document reading device 4, the document 2 placed on a platen glass 5 is illuminated with a light source 6, and an image reading element 11, such as a CCD, is scan-exposed with a reflected light image from the document 2 through a reducing optical system containing a full rate mirror 7, half rate mirrors 8 and 9 and an imaging lens 10, whereby the reflected light image of color materials of the document 2 is read by the image reading ~~device~~ element 11 at a prescribed dot density (for example, 16 dot/mm).

Please amend the paragraph beginning at page 12, line 13, as follows:

The image data thus applied with the prescribed image processing in the IPS 12 is converted to color material gradation data for reproducing the document of four colors, yellow (Y), magenta (M), cyan (C) and black (K), in 8 bits per one color, which are then sent to ~~Raster~~

raster output scanners (ROS) 14 of image forming units 13Y, 13M, 13C and 13K of the respective colors, yellow (Y), magenta (M), cyan (C) and black (K). In the ROS 14 as an image exposing device, image exposure is carried out with laser beams ~~LB~~ LB (LB-Y, LB-M, LB-C and LB-K) corresponding to the color material gradation data for reproducing the document of the prescribed colors.

Please amend the paragraph beginning at page 14, line 13, as follows:

The ROS 14 is to carry out scanning exposure of an image on the photoreceptor drum 15 from the lower side as shown in Fig. 2, and therefore, there is such a possibility that it is contaminated by a toner or the like dropping from the developing device 17 having the four image forming units 13Y, 13M, 13C and 13K. Accordingly, the periphery of the ROS 14 is sealed with a rectangular frame 20, and transparent glass windows ~~21Y, 21M, 21C and 21K~~ 21 (21Y, 21M, 21C and 21K) are provided as a shielding member in an upper part of the frame 20 to expose the photoreceptor drums 15 of the image forming units 13Y, 13M, 13C and 13K with the four laser beams LB-Y, LB-M, LB-C and LB-K.

Please amend the paragraph beginning at page 14, line 18, as follows:

The image data of the respective colors are sequentially output from the IPS 12 to the ROS 14, which is commonly provided for the image forming units 13Y, 13M, 13C and 13K of the respective colors, yellow (Y), magenta (M), cyan (C) and black (K), and the laser beams LB-Y, LB-M, LB-C and LB-K emitted from the ROS 14 corresponding to the image data are subjected to scanning exposure of the surfaces of the photoreceptor drums 15 corresponding thereto, respectively, to form electrostatic latent images. The electrostatic latent images thus

formed on the photoreceptor drums 15 are developed to toner images of the respective colors, yellow (Y), magenta (M), cyan (C) and black (K), by developing ~~device~~ devices 17Y, 17M, 17C and 17K.

Please amend the paragraph beginning at page 15, line 5, as follows:

The toner images of the respective colors, yellow (Y), magenta (M), cyan (C) and black (K), having been sequentially formed on the photoreceptor drums 15 of the image forming units 13Y, 13M, 13C and 13K of the respective colors are transferred by overlapping each other to an intermediate transfer belt (image carrying member) 25 as an endless belt member arranged over the image forming units 13Y, 13M, 13C and 13K with four primary transfer rolls 26Y, 26M, 26C and 26K. The primary transfer rolls ~~26Y, 26M, 26C and 26K~~ 26 (26Y, 26M, 26C and 26K) are arranged on the back surface side of the intermediate transfer belt 25 corresponding to the photoreceptor drums 15 of the image forming units 13Y, 13M, 13C and 13K, respectively. The primary transfer rolls 26Y, 26M, 26C and 26K used in this embodiment have been adjusted in volume resistivity to a range of from 10^5 to 10^8 Ωcm. The primary transfer rolls 26Y, 26M, 26C and 26K are connected to transfer bias electric power sources, which are not shown in the figures, whereby transfer bias having a polarity (positive polarity in this embodiment) opposite to that of the toner is applied at prescribed timing.

Please amend the paragraph beginning at page 16, line 22, as follows:

As shown in Fig. 5, a driven gear 50 is attached to a pivot 27' of the driven roll 27, and the ~~driven~~ driving gear 50 is engaged with a small idler gear 51 among reduction idler gears. A large idler gear 52 among the reduction idler gears is engaged with a driving gear 54 attached to a driving motor 53 as a driving power source containing a stepping motor, a DC induction motor or the like. The ~~driven~~ driving roll 27 is rotationally driven at a prescribed velocity by rotationally driving the driving motor 53 through the driving gear 54, the idler gears 52 and ~~53~~ 51, and the driven gear ~~51~~ 50.

Please amend the paragraph beginning at page 17, line 7, as follows:

As shown in Fig. 2, the toner images of the respective colors of yellow (Y), magenta (M), cyan (C) and black (K) having been transferred by overlapping each other on the intermediate transfer belt 25 are secondarily transferred to recording paper 30 as a recording medium with pressure and an electric field by the secondary transfer roll 29 in contact with the backup roll 28d under pressure, and the recording paper 30 having the toner images of the respective color having been transferred thereto is conveyed to a ~~Fusing~~ fusing device 31 arranged up over. The secondary transfer roll 29 is in contact with the side of the backup roll 28d under pressure, whereby it secondarily transfers the toner images of the respective colors to the recording paper 30 conveyed from the bottom up. The recording paper 30 having the toner images of the respective colors transferred thereto is subjected to a fusing treatment with heat and pressure in the fusing device 31 and then exited with a exiting roll 32 to ~~a exiting~~ an existing tray 33 provided in the upper part of the main body 1.

Please amend the paragraph beginning at page 17, line 25, as follows:

The recording paper 30 having a prescribed size is fed from a paper feeding tray 34 as a paper feeding device with a nudger roll 35, and a feeding roll 36a and retarding roll 36b for separating and conveying paper, and once conveyed to a resist roll 38 through a paper conveying path 37 having a conveying roll 37a, followed by being stopped, as shown in Figs. 2 and 3. The conveying path 37 of the recording paper 30 thus fed is directed upward in the vertical direction. The recording paper 30 thus fed from the paper feeding tray 34 is then dispatched to the secondary transfer point of the intermediate transfer belt 25 with a ~~resist~~ the resist roll 38 rotating at a prescribed timing.

Please amend the paragraph beginning at page 18 line 11 as follows:

In the case where a full color double-sided print is to be obtained in the aforementioned digital color printer and duplicator, the recording paper 30 having an image fixed on one surface thereof is not directly discharged to the ~~discharging~~ existing tray 33 with the ~~discharging~~ existing roll 32 but is switched in conveying direction with a switching gate, which is not shown in the figures, and conveyed to a conveying unit 40 for double-sided print through a roller pair 39 for conveying paper. In the conveying unit 40 for double-sided print, the recording paper 30 is turned inside out with roller pairs 45 and 46 provided along a conveying path 41 and again conveyed to the resist roll 38. The recording paper 30 is then subjected to printing and fixing an image on the back surface thereof and discharged to the ~~discharging~~ existing tray 33.

Please amend the paragraph beginning at page 18, line 25, as follows:

In ~~Figs. 2 and 3~~ Fig. 2, numerals 44Y, 44M, 44C and 44K denote toner cartridges for supplying toners of the respective colors of yellow (Y), magenta (M), cyan (C) and black (K) to the developing devices 17 of the prescribed colors.

Please amend the paragraph beginning at page 19, line 4, as follows:

Fig. 4 shows ~~the image forming unit~~ image forming units of the aforementioned digital color printer or duplicator.

Please amend the paragraph beginning at page 19, line 6, as follows:

The four image forming units 13Y, 13M, 13C and 13K of yellow, magenta, cyan and black colors have the same constitution as shown in Fig. 4, and the toner images of yellow, magenta, cyan and black colors are sequentially formed at a prescribed timing in the four image forming units 13Y, 13M, 13C and 13K. The image forming units 13Y, 13M, 13C and 13K each has the photoreceptor drum 15 as described in the foregoing, and the surface of the photoreceptor drum 15 is uniformly charged with the charging roll 16 for primary charge. Thereafter, the surface of the photoreceptor drum 15 is scan-exposed with the laser beam LB for image formation emitted from the ROS 14 corresponding to the image data, whereby electrostatic latent images corresponding to the respective colors are formed thereon. The laser beam LB for scan-exposure on the photoreceptor drums 15 is arranged to be incident on the photoreceptor drums 15 from a diagonally lower direction slightly right from directly under the photoreceptor ~~drum~~ drums 15. The electrostatic latent images thus formed on the photoreceptor drums 15 are

developed with toners of the respective colors of yellow, magenta, cyan and black ~~in~~ by a developing roll 17a of the developing devices 17 of the image forming units 13Y, 13M, 13C and 13K to form visible toner images, and the visible toner images are sequentially transferred by overlapping each other on the intermediate transfer belt 25 with the charge of the primary transfer roll 26.

Please amend the paragraph beginning at page 20, line 6, as follows:

The surface of the photoreceptor drum 15 after completing the transferring step of the toner image is cleaned by removing the remaining toner and paper dusts with the cleaning device 18 to prepare the next image forming process. The cleaning device 18 is equipped with a cleaning blade 42, and the remaining toner and paper dusts on the surface of the photoreceptor drum 15 are removed with the cleaning blade 42. The surface of the intermediate transfer belt 25 after completing the transferring step of the toner image is cleaned by removing the remaining toner and paper dusts with a cleaning device 43 to prepare the next image forming process, as shown in ~~Figs. 2 and 3~~ Fig. 2. The cleaning device 43 is equipped with a cleaning brush 43a and a cleaning blade 43b, and the remaining toner and paper dusts on the surface of the intermediate transfer belt 25 are removed with the cleaning brush 43a and the cleaning blade ~~42~~ 43b.

Please amend the paragraph beginning at page 21, line 23, as follows:

In this embodiment, accordingly, as shown in Fig. 1, among the plural rolls stretching the intermediate transfer belt 25, a damper roll 28a providing the viscous effect is provided as such a rotating member that also functions as a primary transfer surfacing roll positioned in the

vicinity of the driving roll 27 on the downstream of the moving direction of the ~~belt~~ intermediate transfer belt 25 with respect to the driving roll 27 and on the upstream of the load system. The damper roll 28a is a roll that is driven separately from the driving roll 27 and is in contact with an inner surface of the intermediate transfer belt 25 as the image carrying member.

Please amend the paragraph beginning at page 22, line 18, as follows:

A driven gear 55 is attached to a pivot 28a' of the damper roll 28a as shown in Fig. 6, and the driven gear 55 is engaged with a small idler gear 56 among reduction idler gears. A large idler gear 57 among the reduction idler gears is engaged with a driving gear 59 attached to a driving motor 58 as the driving power source containing a stepping motor, a DC induction motor or the like. The damper roll 28a is rotationally driven at the substantially same average velocity as the surface velocity of the ~~driven~~ driving roll 27 by rotationally driving the driving motor 58 through the driving gear 59, the idler gears 56 and 57, and the driven gear 55.

Please amend the paragraph beginning at page 24, line 23, as follows:

At this time, in the supporting and driving system for supporting and driving the intermediate transfer belt 25, the backup roll 28d, the tension roll 28c and the primary transfer surfacing roll 28b function as the inertial mass, and the backup roll 28d, the tension roll 28c and the like have torsional rigidity. Furthermore, the backup roll 28d, the tension roll 28c and the primary transfer surfacing roll 28b are connected to the driving roll 27 through the intermediate transfer belt 25 mainly functioning as a viscoelastic body, so as to constitute a supporting and driving system.

Please amend the paragraph beginning at page 25, line 13, as follows:

In this embodiment, as shown in Fig. 1, among the plural rolls supporting the intermediate transfer belt 25, the damper roll 28a causing a viscous effect is provided as such a rotating member that also functions as a primary transfer surfacing roll positioned in the vicinity of the driving roll 27 on the downstream of the moving direction of the ~~belt~~ intermediate transfer belt 13 with respect to the driving roll 27 and on the upstream of the load system. The damper roll 28a is configured as being driven in the same direction as the driving roll 27 at the substantially same average velocity as the surface velocity of the driving roll 27.

Please amend the paragraph beginning at page 26, line 20, as follows:

Figs. 7 and 8 are graphs showing the results of the aforementioned measurements. The ordinate in Fig. 7 indicates the value obtained by FFT analysis of the fluctuation in rotation velocity of the driving roll 27. The ordinate in Fig. 8 indicates the value showing a magnitude of the transfer function.

Please amend the paragraph beginning at page 26, line 25, as follows:

It is understood from Figs. 7 and 8 that the decay area appears in a large range of from 3 to 100 Hz on the transfer function characteristics of the driving system, and the peaks having significantly appeared as fluctuation in velocity are disappeared to provide rotational driving of the intermediate transfer belt 25 at an extremely stable velocity. Accordingly, formation of an image defect referred to as so-called "banding" can be certainly suppressed or prevented.

Please amend the paragraph beginning at page 27, line 9, as follows:

The inventors have conducted such an experiment using the color image forming apparatus shown in Figs. 1 and 2 in that the change of the dynamic load torque of the driving roll is observed in the case where the rotation velocity of the damper roll 28a is changed.

Please amend the paragraph beginning at page 27, line 15, as follows:

It is understood from Fig. 9 that the load torque of the driving roll 27 has such characteristics that it increases in the case where the peripheral velocity differential between the damper ~~roll and the belt~~ roll 28a and the intermediate transfer belt 25 is negative (i.e., the damper roll 28a has a negative velocity) and decreases in the case where the peripheral velocity differential is positive (i.e., the damper roll 28a has a positive velocity), with the point of zero peripheral velocity differential, where the velocity of the damper roll 28a agrees with the velocity of the ~~belt~~ intermediate transfer belt 25, as the inflection point. The change in load torque with respect to the change in velocity in the vicinity of the inflection point exerts the viscous effect to attenuate the resonance point at 50 Hz on the transfer function characteristics of the belt supporting and driving system. It is also understood from Fig. 9 that in the case where the peripheral velocity differential between the damper roll 28a and the ~~belt~~ intermediate transfer belt is ±1%, the fluctuation in load torque of the driving roll 27 with respect to the peripheral velocity differential is large, i.e., the viscous effect suppressing fluctuation in velocity of the belt driven by the driving roll 27 can be sufficiently obtained.

Please amend the paragraph beginning at page 29, line 24, as follows:

The inventors have provided a damper roll at all the positions on the belt supporting rolls for supporting the intermediate transfer belt 25 to confirm the effect. It has been found therefrom that the attenuation effect can be obtained most efficiently in the case where the damper roll is provided at a position ~~on the~~ downstream with respect to the driving roll and ~~on the~~ upstream of the load system. It is preferred that the damper roll is provided at that position in the case where no restriction occurs in the constitution of the image forming apparatus.

Please amend the paragraph beginning at page 31, line 13, as follows:

While the damper roll driven at the substantially same velocity as the belt is made in contact with the belt to obtain the viscous effect in this embodiment, it may also be constituted in such a manner that the viscous damper is operated by connecting to the ~~driven~~ <u>driving</u> roll.

Please amend the paragraph beginning at page 31, line 22, as follows:

Fig. 13 shows Embodiment 3 according to the invention, in which the same members as in the aforementioned embodiments are attached with the same symbols. In the Embodiment 3, image carrying members providing the viscous effect are made in contact with the photoreceptor drums <u>25</u> in addition to the intermediate transfer belt <u>25</u>.

Please amend the paragraph beginning at page 32, line 3, as follows:

In the Embodiment 3, a belt member <u>25</u> that is cyclically driven at the substantially same velocity as the photoreceptor drums is made in contact with the photoreceptor drums <u>25</u>.

Please amend the paragraph beginning at page 32, line 6, as follows:

That is, in the Embodiment 3 shown in Fig. 13, a damper roll 28a that also functions as a primary transfer surfacing roll is provided at a position ~~on the~~ downstream of the driving roll 27, and a damper belt 65 as a rotating member for suppressing fluctuation in rotation velocity of the photoreceptor drums 15 is stretched between one end of the damper roll 28a and one end of the primary transfer surfacing roll 28b.

Please amend the paragraph beginning at page 32, line 22, as follows:

In order to improve the transfer efficiency of the toner images from the photoreceptor drums 15 to the intermediate transfer belt 25 in the Embodiment 3, the peripheral velocity differential between the photoreceptor drums 15 and the intermediate transfer belt 25 is set at 3% (wherein the velocity of the intermediate transfer belt 25 is larger). Furthermore, the damper roll 28a is provided to suppress fluctuation in velocity of the intermediate transfer belt 25 as similar to the Embodiment 1, and the damper roll 28a is driven at the substantially same velocity as the driving roll 27 and is in contact with the inner surface of the intermediate transfer belt 25.

Please amend the paragraph beginning at page 31, line 22, as follows:

The end of the damper roll 28a has a stepped shape as shown in Fig. 14, at which the diameter is smaller by 3%. The end of the primary transfer surfacing roll 28b has the same shape, and ~~a damper~~ the damper belt 65 for the photoreceptor drum 15 is wound on the parts having the smaller diameter of the damper roll 28a and the primary transfer surfacing roll 28b. The damper belt 65 is made in contact with ends on the surfaces of the four photoreceptor drums 15.

Please amend the paragraph beginning at page 33, line 22, as follows:

Fig. 15 shows Embodiment 4 according to the invention, in which the same members as in the aforementioned embodiments are attached with the same symbols. In the Embodiment 4, the image carrying member is constituted with a photoreceptor drum 15, and a rotating member 16 rotationally driven at the same velocity as the photoreceptor drum 15 is made in contact with the photoreceptor drum 15.

Please amend the paragraph beginning at page 34, line 4, as follows:

In this embodiment, the rotating member also functions as a member 16 for forming an image on the photoreceptor drum 15.

Please amend the paragraph beginning at page 34, line 6, as follows:

That is, in the Embodiment 4 shown in Fig. 15, the surface of a photoreceptor drum 15, to which a driving force is transmitted from a driving power source, is made in contact with a damper roll 16 that is rotationally driven at the substantially same velocity as the photoreceptor drum 15 with a different driving power source or the same driving power source. The damper roll 16 also functions as a charging roll as an image forming member contributing image formation for charging the surface of the photoreceptor drum 15.

Please amend the paragraph beginning at page 34, line 18, as follows:

As another constitution where fluctuation in rotation of the photoreceptor drum 15 is suppressed, such a constitution as shown in Fig. 16 may be employed in that a side surface of a driving gear 74 (photoreceptor drum gear) in the driving force transmission path for driving the

photoreceptor drum 15 ~~of~~ from a driving motor 70 to gears 71 to 74 is made in contact with a damper member 75 formed, for example, with a ~~robber~~ rubber roller, that is driven with a separate driving power source at the substantially same velocity.